V. Outdoor Exhibits, Markers, and Other Elements

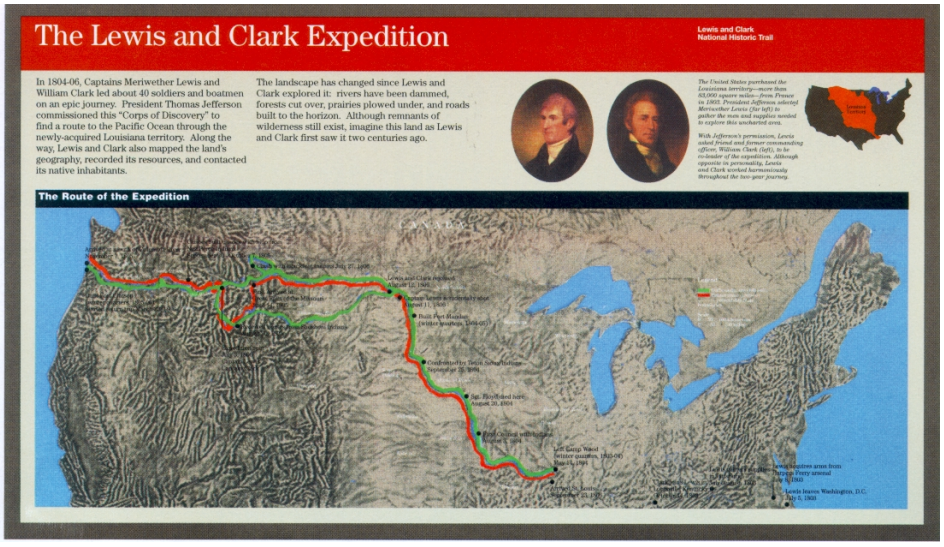
Outdoor exhibits, markers, and other elements along the Lewis and Clark Trail will provide travellers with the information to find their way to sites and amenities. These elements will also invite visitors to learn through interpretation about the rich natural and cultural heritage of the Lewis and Clark Trail in Washington. Outdoor exhibits include interpretive and orientation panels mounted to bases, stands, and kiosks. These exhibits provide site specific interpretation and orientation information. Other elements such as plaques and trail markers will fill in the details of the Lewis and Clark network. In addition, there are highway signs (see Appendix) that will help direct travellers along the Lewis and Clark Trail Highway and assist them in finding the way to significant sites. All of these elements will work together to give consistency to the trail system in Washington.

Interpretive and Orientation Panels

Interpretive and orientation panels are the keys to a successful Lewis and Clark Trail interpretive experience in the State of Washington. Placed at significant Lewis and Clark Expedition sites along the corridor, these exhibits will interpret the themes and stories of the Corps of Discovery as they relate to the unique qualities and history of the site.

Size and design of the panels will vary according to content, context, audience, and function. There are two types of interpretive panels, both of a different size: one panel will be used to focus on important or more far reaching interpretive themes, the other panel will focus on more specific detailed interpretation. These panels will be placed on bases and stands at key pull-offs and important sites along the Lewis and Clark Trail and along related interpretive trails. The story and message that relates to a specific site are told through these interpretive exhibits, providing the opportunity to link the physical and historic qualities of the site to the theme.

In addition to the two types of interpretive panels, there is also a larger size panel for orientation or for major interpretation. Kiosk structures will support these large panels. At kiosk locations, visitors should be able to find information about their location along the Lewis and Clark Trail and their proximity to goods and services These locations will also provide an opportunity for visitors to learn about safety, stewardship, and major events of the Lewis and Clark Expedition. These exhibits will reach a large number of visitors, helping to establish the identity of the corridor and promote a sense of heritage and stewardship.



National Park Service Standard Lewis and Clark Interpretive Panel

V. Outdoor Exhibits, Markers, and Other Elements

Signs are such a powerful tool for capturing attention that they are used for traffic and

Interpretive Panel with a "catchy" heading

safety information. Unlike traffic signs, interpretive signs (panels) will need to hold attention long enough to convey the interpretive theme and message. These panels accomplish this with "catchy" headings, graphics, and minimal text. With good interpretive panels, visitors are connected to the environment and motivated to look and read. If successful, visitors will want to move on to other Lewis and Clark Trail sites to see and learn more.

Advantages of Panels

Interpretive and orientation panels offer many advantages over other types of interpretation. Interpretive panels are:

- appealing to a wide range of visitors;
- effective at depicting another time and place, bringing features closer into view, showing processes, and revealing the significance of a place;
- compared to other forms of interpretation, interpretive panels are relatively inexpensive to design, fabricate, install, maintain, repair, and replace;
- durable enough to last for decades;
- self-pacing for visitors of various ages, multiple interest levels and abilities;
- available at all times for viewing and not required to have staff present;
- highly visible for attracting attention; and
- flexible for a variety of graphic and text materials.

Types of Panel Materials

There are several types of interpretive panel materials that can be used. Each has specific qualities and costs that should be weighed in the planning and design process. Costs will vary based on local availability, and complexity of the design. The rough cost estimates given here do not include design or graphic production. They are provided for fabrication and are provided as a general guideline only. For more accurate costs, request estimates directly from panel fabricators. Some of the more popular choices include fiberglass embedment, direct digital imaging, and porcelain enamel.

Fiberglass Embedment

This process is where graphics, maps, and text are printed onto high-quality paper then embedded in fiberglass. These panels will last in most environments for two to ten years. One advantage, especially in areas of high vandalism, is the inexpensive replacements or copies. If multiple prints are made up front, they can be embedded later for about $150. A full-color graphic has a high initial cost, but additional paper copies, if produced at the same time, are inexpensive. A 24" x 36" screen printed embedded panel will vary widely in costs (between $250 and $3,000).

Direct Digital Imaging

This process involves a newer technology that transfers an electronic graphic file directly to a vinyl or phenolic resin sheet, where it can then be laminated to a sheet of

aluminum or other structural backing. Some fabricators fuse prints into a foamed, closed cell polyvinyl chloride (PVC). Visual quality may not be as high as some other processes, but materials are relatively inexpensive for originals or copies.

Because this technology is relatively new, longevity and durability for outdoor applications are being tested by the National Park Service (NPS). This technology is rapidly evolving and promises to offer a very inexpensive and good quality solution in the future. Until testing is complete, consider using this process only for protected orientation panels. The need to update maps and information warrants the use of this inexpensive product. A 24" x 36" panel mounted on a sheet of aluminum and covered with a clear protective laminate can cost approximately $400 to $1000.

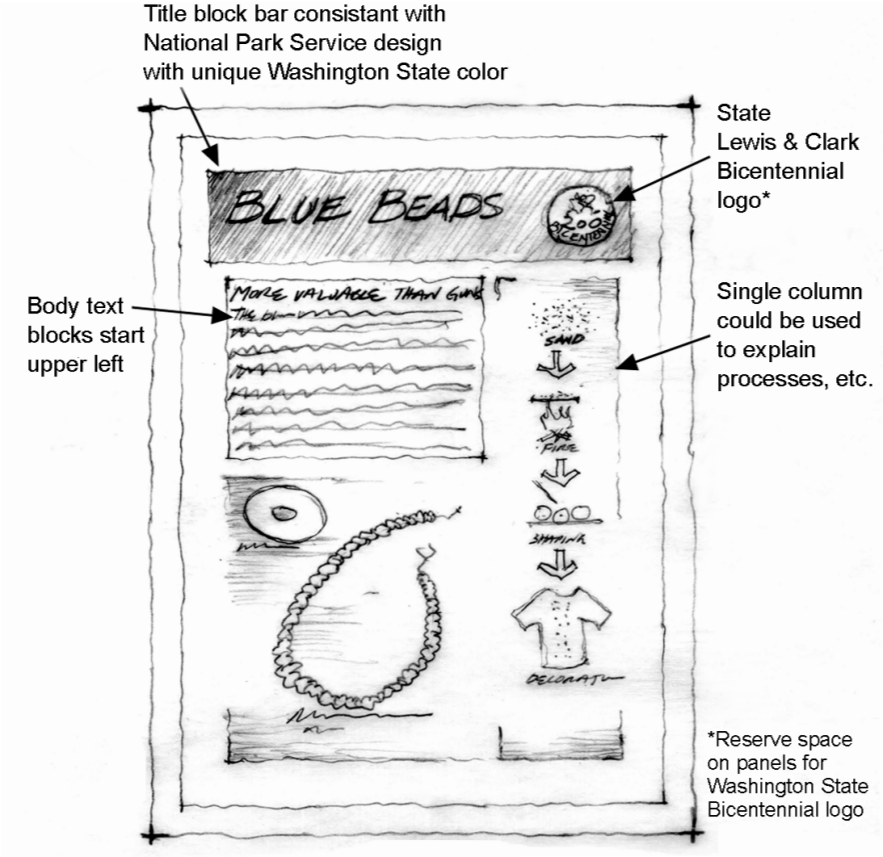
Porcelain Enamel

This is a process that uses ground glass colored with mineral oxides and fuses it to steel sheets by baking at high temperatures. The process is excellent for reproducing color, line art, photographs, maps, and other graphics. These panels are very hardy even in desert and marine environments and have a good track record lasting 25 years. They can be more expensive than other materials, depending on the complexity of the design. A 24" x 36" panel can cost from about $2000 to $4,000.

Other Materials

There are other materials and methods, such as wood, that may not compare to the functional aspects of these materials, but may be perfect for certain applications. The following table describes general characteristics of some common types of materials.

	Porcelain Enamel	***Fiberglass Embedded***	***Direct Digital Imaging***	***Wood***
Longevity	20 plus years	2 to 10 years	1 to 4 years	Low
Maintenance	Low	Medium	Low	Medium
Weather Durability	High	Medium to Low	Medium to Low	Low
Vandal Durability	High	Medium	Medium	Low
Fabrication Cost (24" x 36")	$2,000 to $4,000	$250 to $3,000	$400 to $1,000	Varies
Photo Quality	Excellent	Low	Medium to Low	N/A
Linework Quality	Excellent	Medium	Medium to Low	Low
Color Quality	Excellent	Medium	Medium	Low
Production Time	4 months	4 months	2 to 4 weeks	Varies



Example: Detailed Interpretive Panel Design

Detailed Interpretive Panel

Description

- 24" high x 18" wide
- Type of material varies

Requirements

- If located in the Columbia River Gorge National Scenic Area, you will need to incorporate their design guidelines

Recommendations

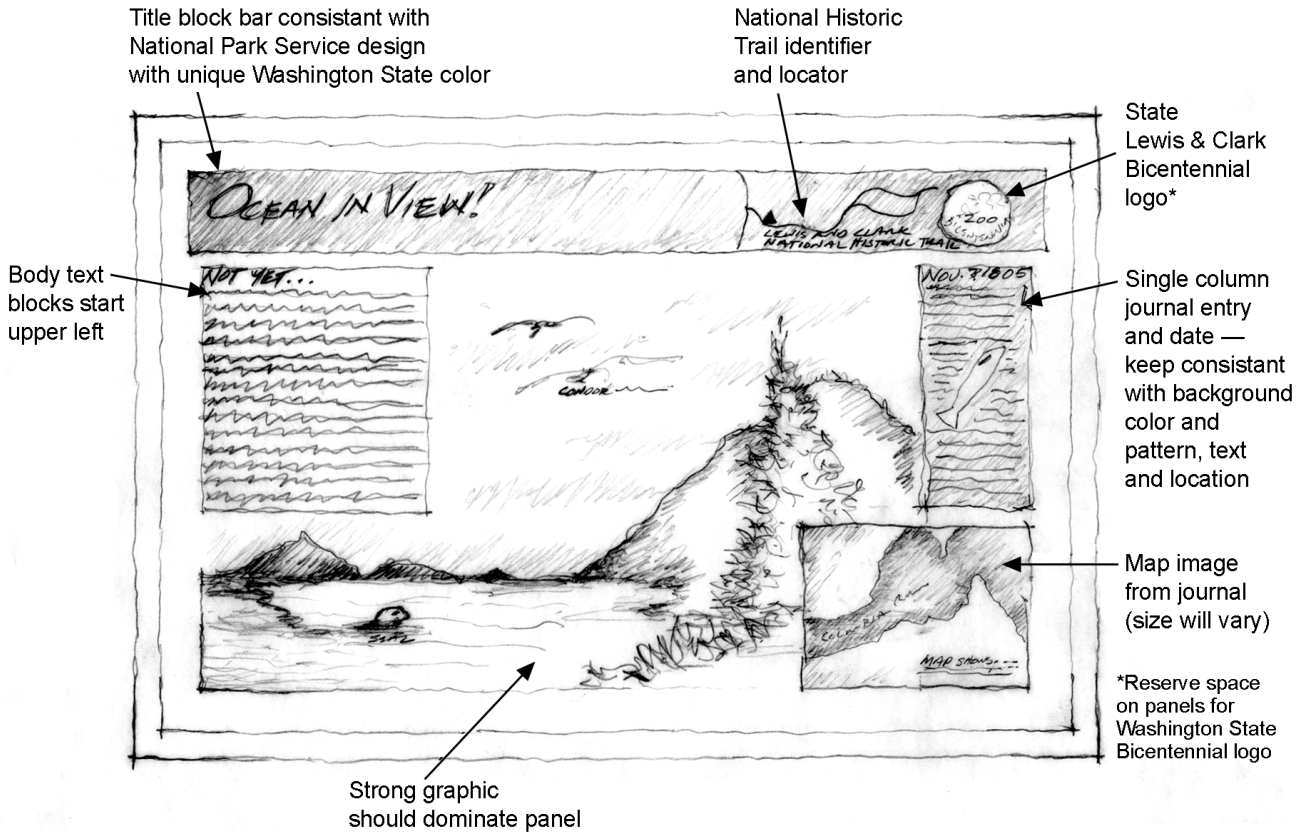
- Compatible with National Wayside Exhibit Guidelines and these Design Guidelines
- Consistent with interpretive theme and tied specifically to the site
- Review with State Historical Society and the State Agency Advisory Team (AAT)

Purpose/Need

- Provide site-specific and thematic interpretation along the Lewis and Clark Trail
- Provide detailed, thematic interpretation at Lewis and Clark related sites
- Tell the details of the Corps of Discovery in the State of Washington including specific events and exploration activities

Location

- To accompany other interpretation as a secondary panel at wayside exhibits or stand alone on Lewis and Clark interpretive trails
- Public right-of-way or public land that is safely accessible



Example: Standard Interpretive Panel Design

Standard Interpretive Panel

Description

- 24" high x 36" wide
- Type of material varies

Requirements

- If located in the Columbia River Gorge National Scenic Area, you will need to incorporate their design guidelines

Recommendations

- Compatible with National Wayside Exhibit Guidelines and these Washington State Lewis and Clark Design Guidelines
- Consistent with interpretive theme and tied specifically to the site
- Review with State Historical Society and AAT

Purpose/Need

- Provide for site-specific and thematic interpretation along the Lewis and Clark Trail
- Provide thematic interpretation at Lewis and Clark related sites
- Interpret major events and exploration activities through themes of the Corps of Discovery in the State of Washington

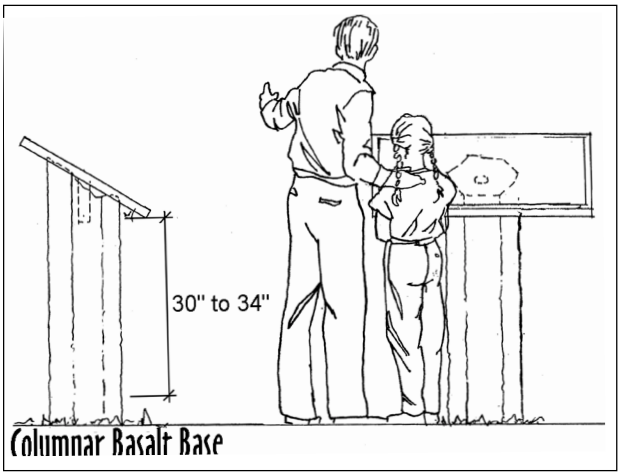
Location

- To accompany other interpretation at wayside exhibits or stand alone at important sites on Lewis and Clark interpretive trails
- Public right-of-way or public land that is safely accessible

Interpretive Panel Bases, Stands, and Frames

Holding the interpretive panels in place with a secure and vandal resistant base or stand is critical for the longevity and appeal of the interpretive display. There are standard units available made of common materials such as wood, metal, and plastic, or even recycled materials. Durable, low maintenance materials should be used. The National Park Service uses aluminum because it is lightweight, strong, reasonably priced, and durable. All bases and frame systems should be designed as tamper-resistant, but still allow for panel removal in case of repair and replacement.

Bases and stands provide an opportunity to enhance the interpretive experience along the Lewis and Clark Trail. Drawing from some of the aesthetic qualities within each region, these elements can reflect the natural and cultural regionalism in which they are placed. They can enhance the drama of the interpretation to capture the feeling of what members of the Lewis and Clark Expedition saw when they first visited the region. Included below and on the following pages are suggested options that include a columnar basalt base, a pole style stand, and a base made of timber. These conceptual sketches are provided to help guide the design process and are not intended to be used for construction.

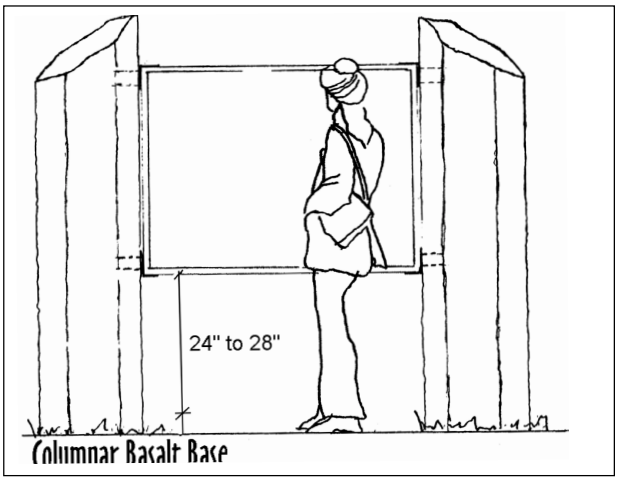


Columnar Basalt Base

This base draws from the basalt formations and canyon walls that line the Snake and Columbia Rivers. Clark often noted this rock in his journal: *"The hills or assents...is faced with dark rugged Stone"*. It is a powerful visual element that appears repeatedly along the trail and is closely associated with Southeastern Washington and the Columbia River Gorge region.

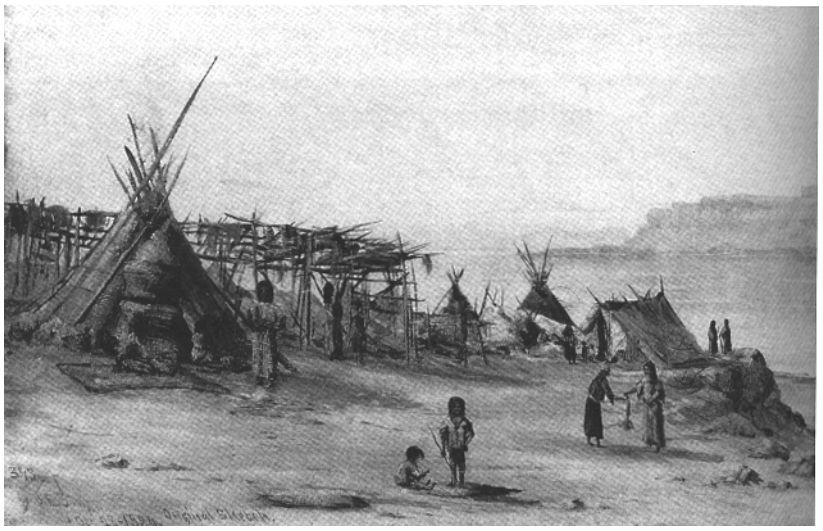
Columnar Basalt

The columnar basalt base is constructed of actual columnar basalt, available through most quarry rock dealers in the state and some businesses specializing in landscape materials. Two types of bases can be created, a pedestal style and a double column style. The pedestal style uses an 18" to 24" diameter single column in which an angled metal frame can be secured by drilling and/or mounting into the top of the rock. For the double column style, the frame is flanked between taller columns and attached by drilling and setting bolts into the sides of the rock. If columnar basalt is unavailable, pigmented concrete cast in a form liner could be substituted.



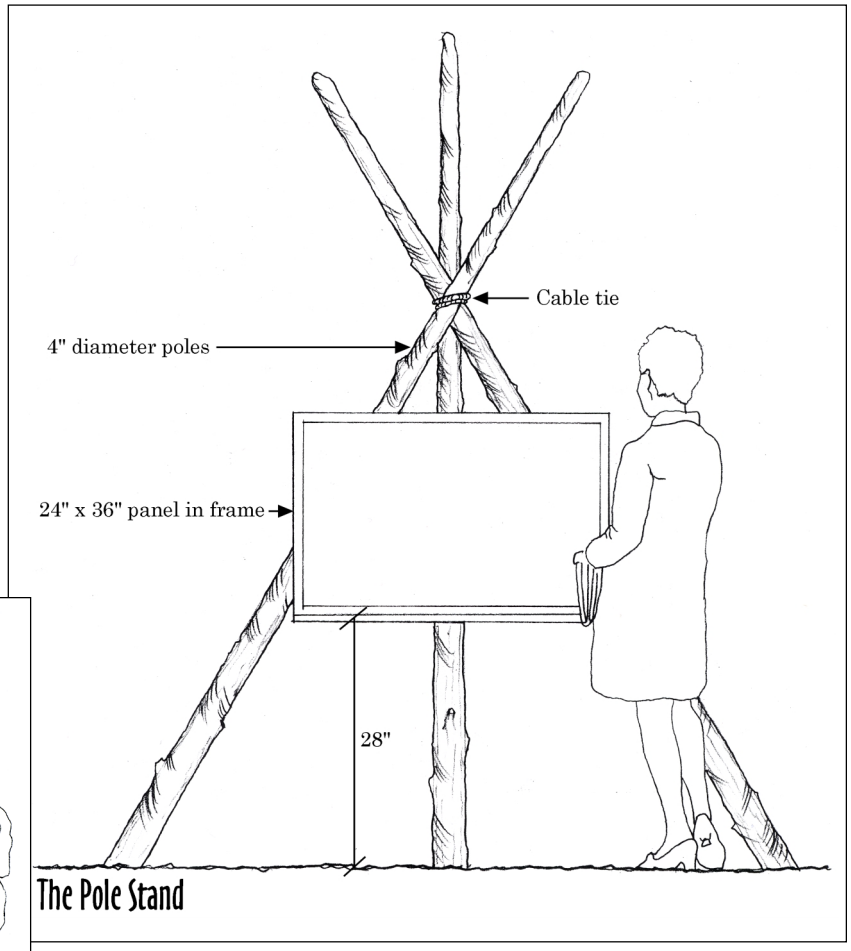
The Pole Stand

The pole structure was a common element in many Native American architectural features along the Lewis and Clark Trail. From fish drying racks, to lean-to's, fishing scaffolding, and mat houses, the structure of binding poles was noted throughout the journals. This image is quickly and easily recognizable and captures the essence of what members of the Lewis and Clark Expedition saw.

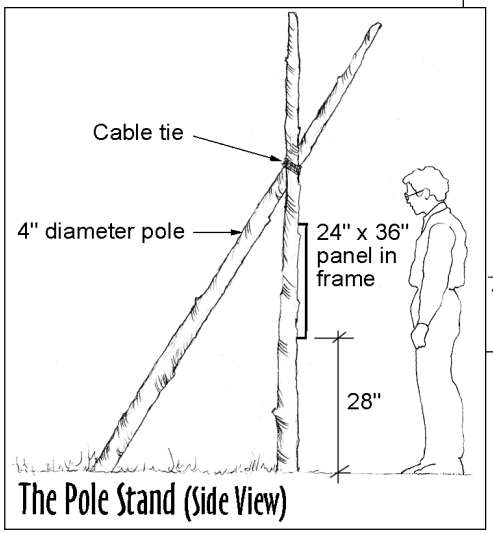


Autumn fishing camp at Celilo, painting by James Everett Stuart, October 1844

Derived from the pole structures seen by Lewis and Clark, the pole stand is a structure of three poles. Depending on resources, the stand poles could be fabricated as fiberglass, or some other durable material, cast from actual cut tree poles. Depending on resources and location, a heavy timber pole, if treated and well-constructed, could suffice. The joint of the poles will need to be strong, as will the attachment of the frame and the poles to the footings.



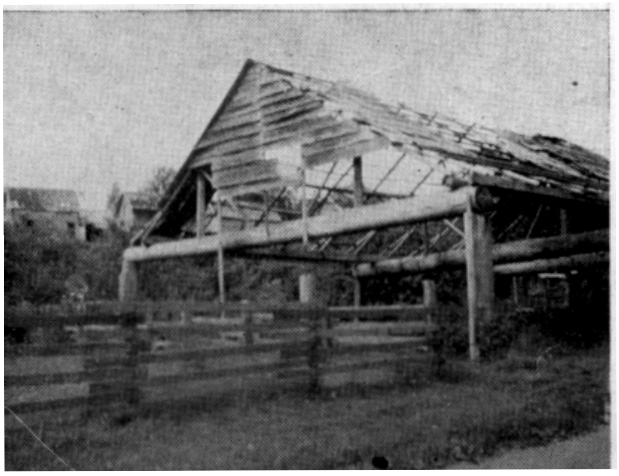
The Pole Stand



The Pole Stand (Side View)

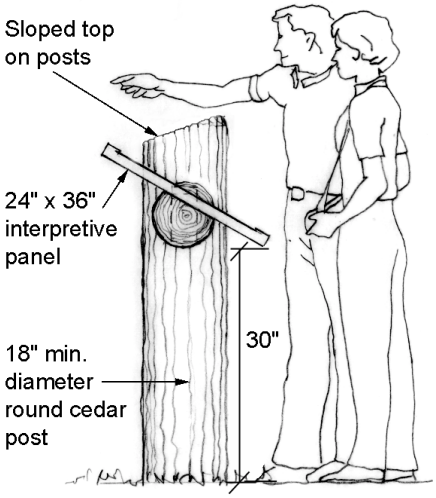
The Timber Base

As Lewis and Clark moved toward the Pacific coast, they noted a change in environment as well as in the character of Native American architectural structures. They saw the largest trees they had ever seen, huge Douglas firs and western redcedars. The Native American architecture reflected the availability of these building materials in their houses and lodges built of large posts, beams, and cedar planks. In fact, the Corps would later build their own winter quarters of these same types of materials.

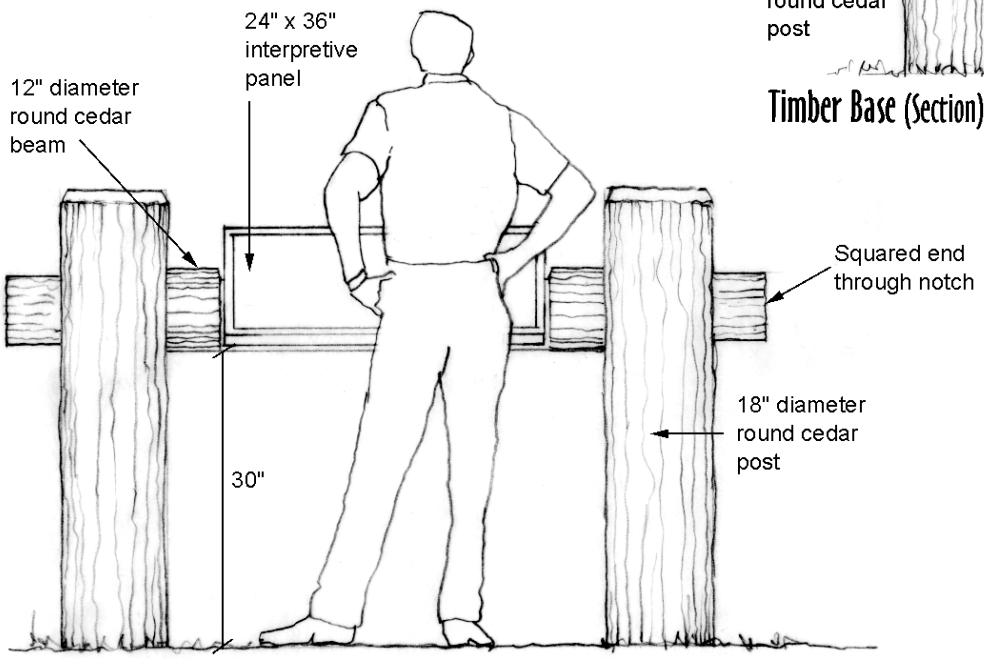


Coastal Native American Timber Lodge

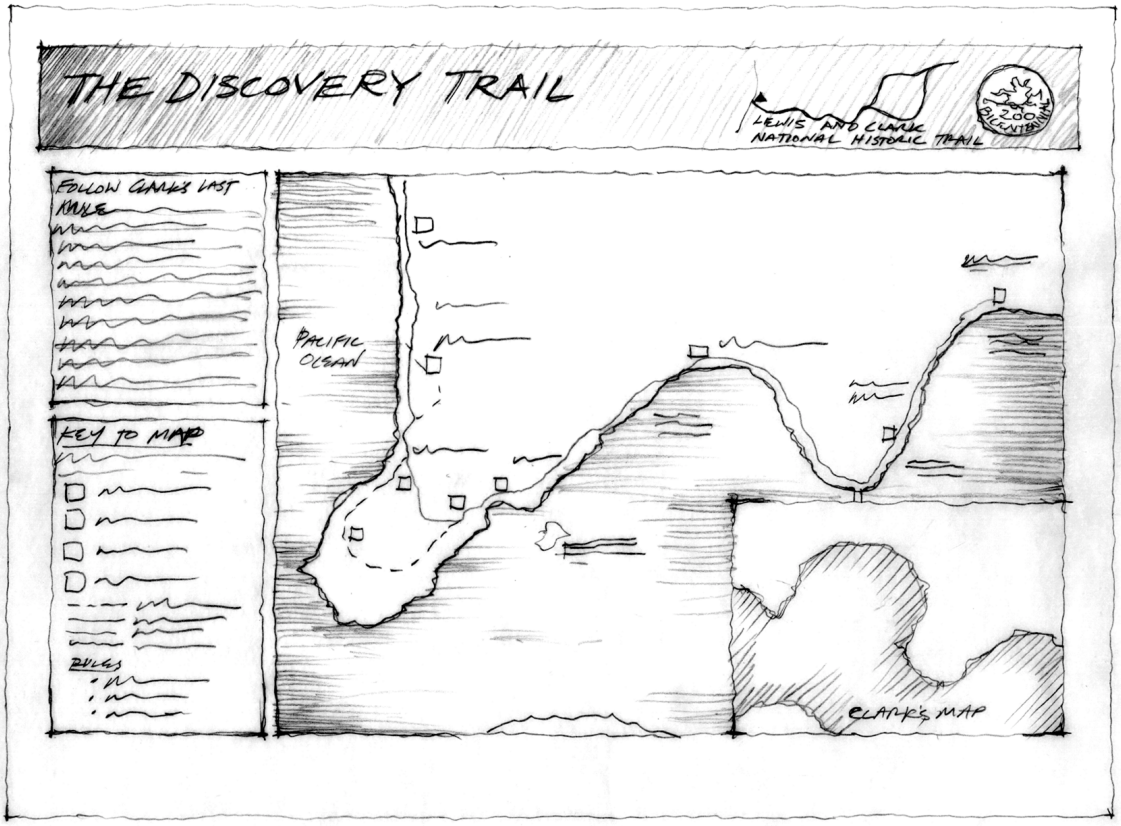
The timber base should use large timber members chemically treated for longevity. A frame is attached to the timber to hold the interpretive panel in place. The timber pieces could be either round or square, both are appropriate. The members should be large and roughly hewn with a smaller cross beam secured through a mortise joint. The base could be used for angled interpretive panels or modified for upright orientation panels.



Timber Base (Section)



Timber Base



Example: Orientation Panel

Orientation Panel (or Major Interpretive Panel)

Description

- 36" high x 48" wide
- Type of material varies

Requirements

- If located in the Columbia River Gorge National Scenic Area, you will need to incorporate their design guidelines

Recommendations

- Compatible with National Wayside Exhibit Guidelines and these Washington State Lewis and Clark Design Guidelines
- Consistent with interpretive theme and tied specifically to the site
- Review with State Historical Society and AAT

Purpose/Need

- Provide visitor orientation to area facilities and other related sites along the Lewis and Clark Trail
- Alternatively could be used to interpret the most significant events and exploration activities at major sites. Incorporate themes of the Lewis and Clark Expedition in the State of Washington

Location

- On kiosks and at major wayside exhibits, and trailheads along the Lewis and Clark Trail Highway
- Public right-of-way, or public land that is safely accessible

Kiosks

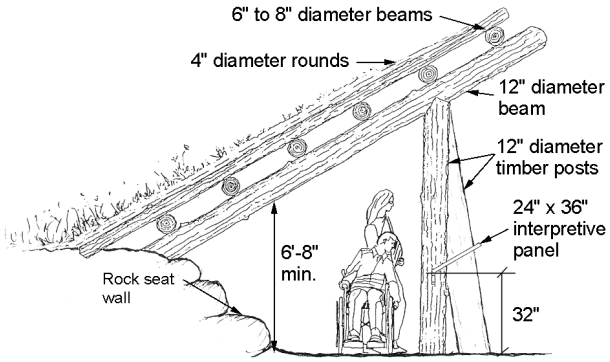
Kiosks are architectural structures that are open on the sides, but have a covered roof to help to protect the displays and the visitors. Kiosks generally will hold large orientation panels, information display areas for special notices and events, and interpretive panels. Kiosks can vary in size to accommodate up to eight panels. They will be located at major orientation areas and significant historic sites along the Lewis and Clark Trail Highway, and on major interpretive trails.

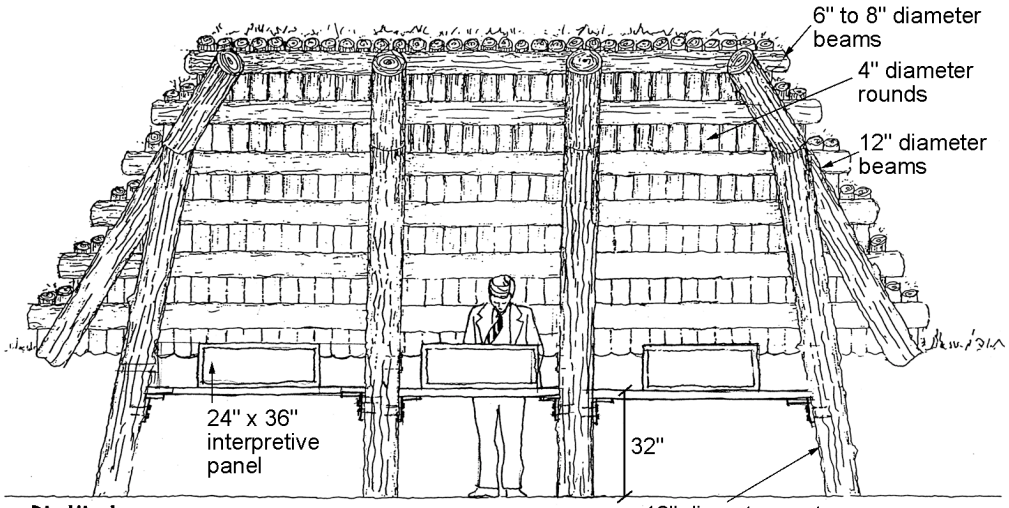
The architecture of the kiosks provides an opportunity to reflect the unique natural and cultural characteristics of the various regions that members of the Corps of Discovery saw on their journey through the Pacific Northwest. Each style and the materials used should be consistent with the character and location of the site. Options for kiosks include a pit structure style, a mat and pole style, and two plank styles.

The Pit Structure Style Kiosk

In what is now Southeastern Washington, the earliest known structures were partially submerged into the earth. Using a timber frame, the structures were then covered with mats woven of bulrushes (tules) and cattails to provide protection from the weather. These pit houses were popular until influences of the Plains Tribes and others led to an increase in the use of poles covered with mats and sometimes hides. When Lewis and Clark traveled through this region, there were both forms of architecture.

The pit structure style kiosk borrows the basic timber structure and roofing elements of the pit house, but opens to one side. This creates more of a lean-to effect suitable for sites that need to integrate harmoniously into the landscape and for creating viewpoint overlooks.





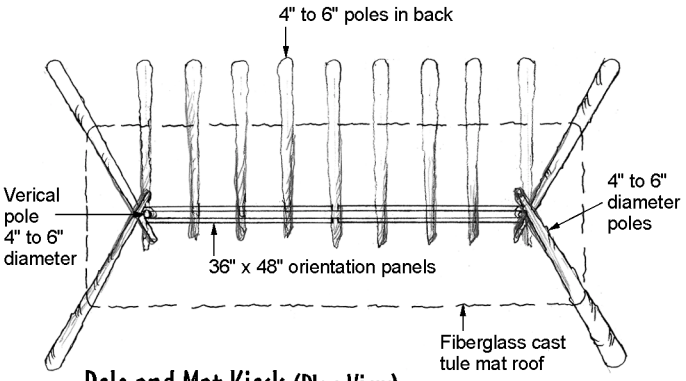
Pit Kiosk

The Mat and Pole Style Kiosk

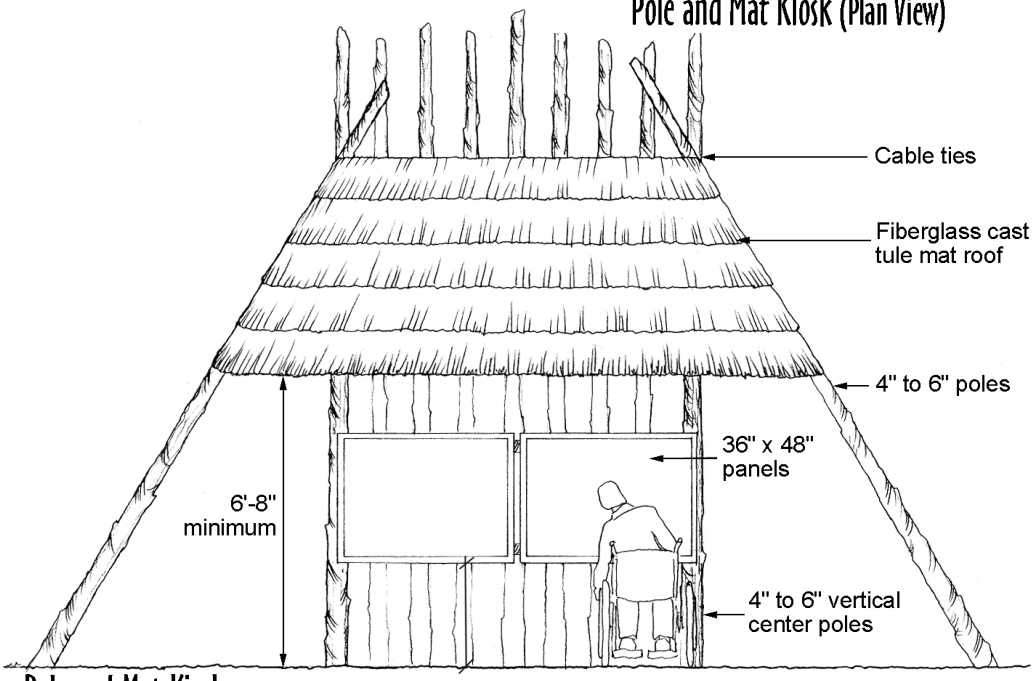
Replacing the pit house as the dwelling of choice, the mat and pole structure was popular during the time Lewis and Clark traveled through the southeastern area of Washington along the Snake and Columbia Rivers. The poles were small trees stripped of bark and branches. Mats, used to cover the structure for weather protection, were woven from reeds. Sometimes smaller, conical structures were built for small families or storage, but extended families typically shared longer, oblong lodges.

Nez Perce Pole and Mat Lodge

The mat and pole style kiosk draws upon the basic pole structure with two sets of tripod configured poles. These poles can be fiberglass castings of real tree poles (see pole stands). These poles are to be set in line to provide a flat mounting surface. Poles could be bound with stainless steel cables at the intersection points and set in concrete footings for stability. The "mat" would cover only the top of the structure, keeping the sides open. Mat material could also be fabricated from castings of actual tule mats. Casting material (such as fiberglass) should be waterproof, durable, and colored in a neutral brownish gold.



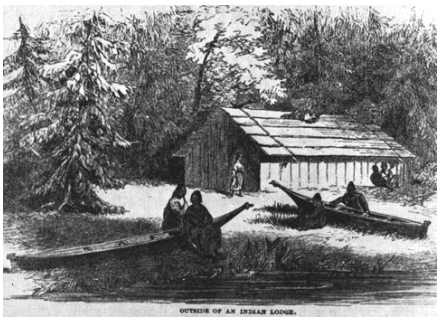
Pole and Mat Kiosk (Plan View)



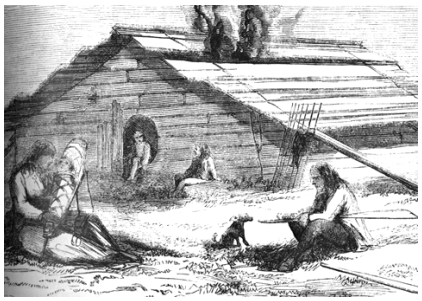
Pole and Mat Kiosk

The Plank Style Kiosk

As the Corps of Discovery moved down the Columbia River toward the Pacific Coast, the change in climate and environment was dramatic. Large trees and thick forests made timber a readily available resource. This was reflected in the plank style houses and lodges they began to see in the area of the large rapids of the Columbia River Gorge, near the modern day location of Horsethief Lake State Park. These were the first all wood houses they had seen since leaving the lower Missouri River. Made of a notched timber post and beam frame, these structures were covered in cedar planks split from large trees. The planks covered the sides and roof. The angle and placement of the planks varied. Some tribes, like the Chinook, used mostly a gabled roof with overlapping planks laid horizontally and siding was predominantly vertical. For ventilation and smoke exhaust, either an opening could be left in the roof, or the siding at the rear was intentionally left short.

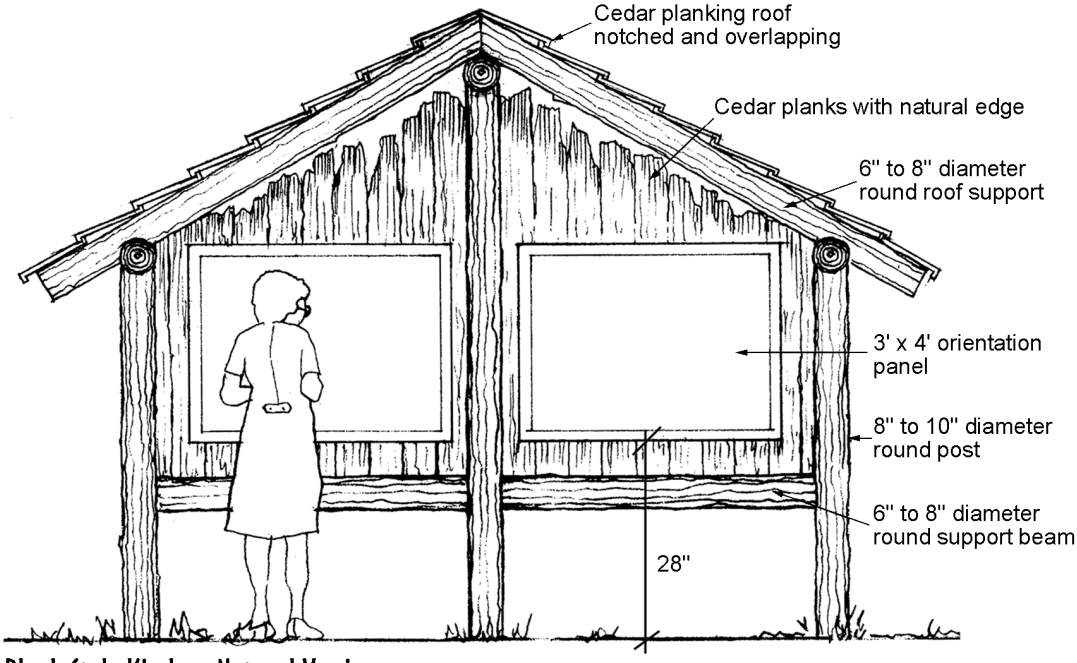


Chinook Plank Lodge

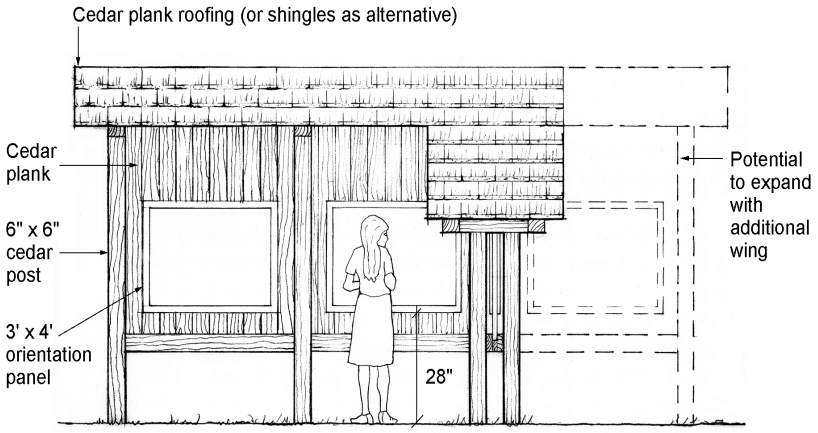


Chinook Lodge

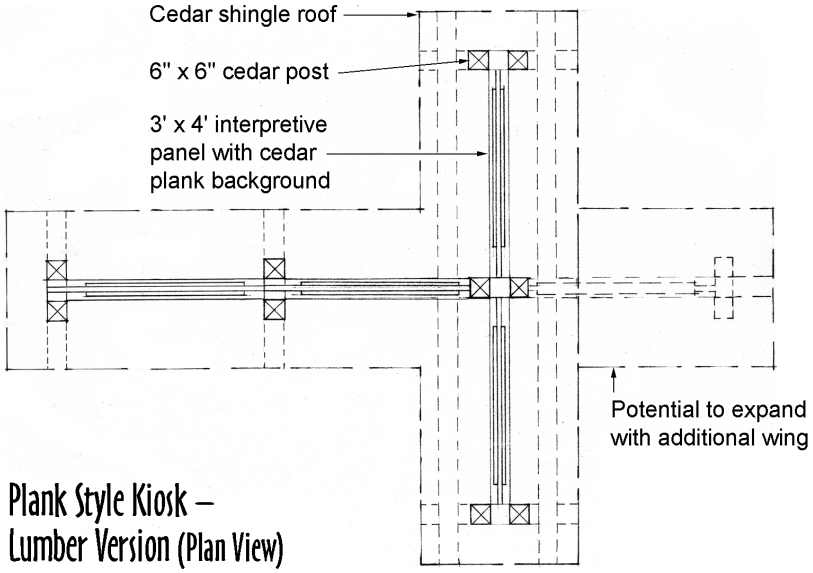
Drawing on this architecture and the wooded environment of the western region, the plank style kiosk uses planks supported with a timber post and beam frame structure. This structure is roofed with overlapping planks and uses planks as a backing for orientation panel placement. Treated dimension lumber could be used as an alternative, although real split redcedar and rounds would be more visually effective.



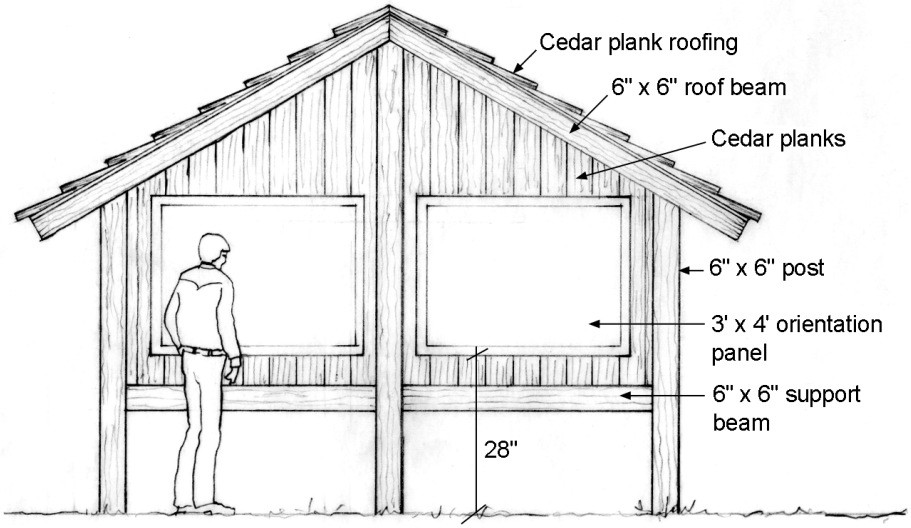
Plank Style Kiosk – Natural Version



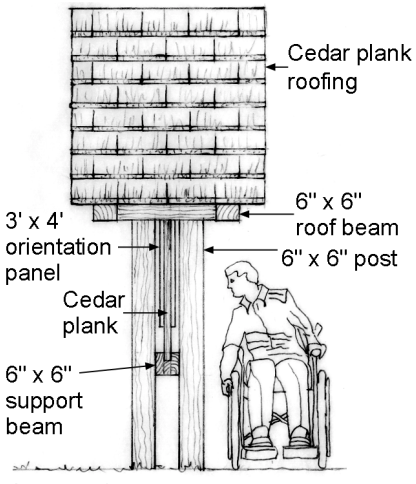
Panel Style Kiosk – Lumber Version



Plank Style Kiosk – Lumber Version (Plan View)



Plank Style Kiosk – Lumber Version



(Side View)

Marking Other Elements (The Lewis and Clark Bicentennial Plaques)

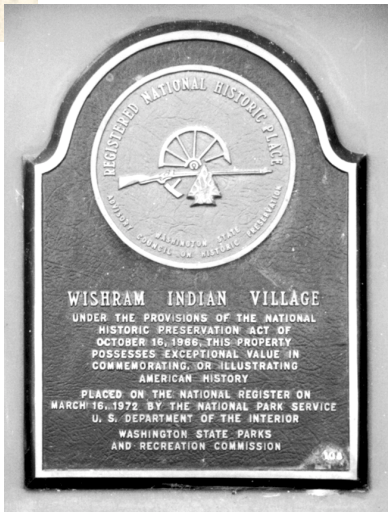
In anticipation of the bicentennial anniversary of the Lewis and Clark Expedition, a National Bicentennial logo has been designed. In addition, the State of Washington is anticipating its own commemorative logo to give an image to the Washington Lewis and Clark Expedition Bicentennial. It is suggested that this logo be incorporated into a small 4" bronze plaque for interpretive panels, bases, stands, kiosks, site markers, trail markers, and other elements to be built for the Lewis and Clark Bicentennial. The plaque will be a way to commemorate the Bicentennial era interpretive improvements and mark them as a lasting legacy.

A larger plaque could also be developed that includes both the State Bicentennial logo and room for commemorative words and acknowledgments. This larger, 9" by 12" bronze plaque could be used for the more special exhibits and memorials. This plaque could be used to memorialize or acknowledge significant persons and/ or groups whose efforts had an important effect on the study, development, or creation of Lewis and Clark Bicentennial facilities in the state.

An Existing Bronze Plaque

Using the logo in a commemorative plaque provides the opportunity to strengthen Washington's effort in the Bicentennial commemoration. The logo will provide a valuable link with all future written and graphic work, creating a clear and consistent message for travelers. This logo should relate to the national bicentennial logo as well, establishing a national connection. The logo and plaques will quickly identify and evoke Washington's importance in the Lewis and Clark story.

National Lewis and Clark Bicentennial Logo



Bronze Plaque

Bronze Plaque on Basalt Monument in Dayton, Washington, along the Lewis and Clark Trail

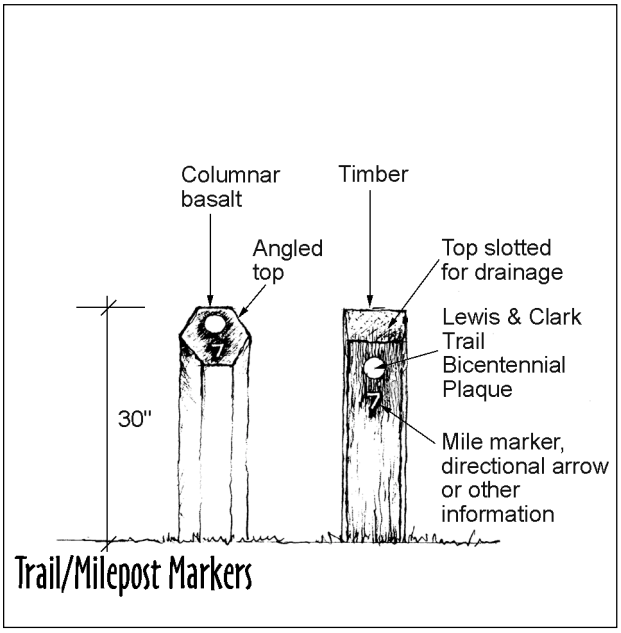
Trail/Milepost Markers

Trail markers can be used to mark interpretive trails related to the Lewis and Clark Expedition within Washington State. Trail markers can be placed at trail turns, intersections, scenic spurs, views, overlooks, interpretive way stations, and can double as mile markers on longer trails. Trail markers should compliment the natural environment, but not be so obscure as to be missed. Use of indigenous material such as basalt or wood is preferred with an etched, carved, or plate directional arrow and number if used as a mile marker. In addition, each marker could be complemented with a small Lewis and Clark Bicentennial logo plaque to commemorate the Bicentennial era trail construction or improvements.

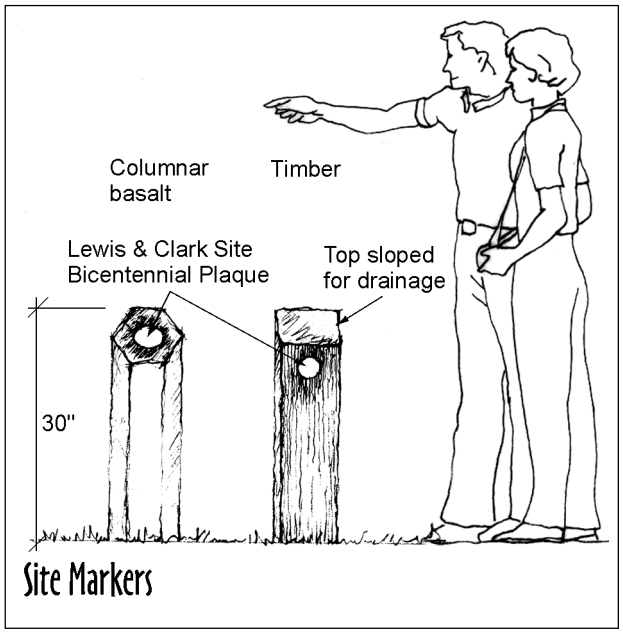
Site Markers

Site markers will mark sites or viewpoints with interpretive significance along Lewis and Clark interpretive trails. Unlike nationally certified historic sites that use the Lewis and Clark National Historic Trail triangular sign, these sites, such as viewpoints along a trail may not be certified, but could enhance a visitor's experience. These sites could be referenced in trail maps or interpretive brochures. In these cases, a small Lewis and Clark Bicentennial logo site plaque mounted on a trail marker style base could acknowledge the site or viewpoint.

Depending on the location, site markers may be placed at, or overlooking, important historic features, where appropriate. Pointing out these sites will provide a more accurate interpretive experience where the journal accounts can be tied to the landscape. Disagreement between specific locations should be settled by Lewis and Clark experts and scholars, such as the Governor's [Washington State] Lewis and Clark Trail Committee. When final determination of a location can not be proven, it should be clearly stated. Sites that are sensitive because of rare or endangered flora or fauna, because of cultural significance, or because of property ownership should not be marked.



Lewis and Clark Trail Markers



Lewis and Clark Site Markers

Other Elements

While it is not the intention to dictate a style for every element that is built, it is worth suggesting some general considerations that may help to give a consistent image to many of the other elements along Washington's portion of the Lewis and Clark Trail. Some of the aesthetic and design considerations that are applied here to interpretive facilities could be adopted for use in the design and improvement of other elements like entry monuments, memorials, picnic shelters, rest rooms, fences, lighting, etc. The goal is to harmoniously fit elements together along the Lewis and Clark Trail emphasizing connections between architectural character, scale, materials, color, and other design elements.

Entry monuments that relate to sites associated with the Lewis and Clark Trail should feature the same or similar elements shown in the design of bases and stands, or kiosks. Memorials could also draw upon the same qualities with the possibility of a customized plaque.

Picnic shelters and tables could also be congruent with architectural elements such as those depicted in the kiosk architecture. Rest rooms could pick up on the wall and roof forms and colors of the kiosk designs.

Site furnishings such as seating and benches could also reflect the Lewis and Clark design aesthetic, as could outdoor lighting.